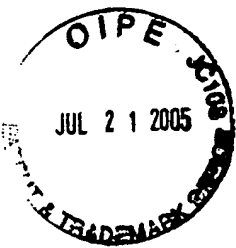


AF 22W



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Steven P. Jones

Serial No.: 09/903,177

Filed: July 11, 2001

For: METHOD AND APPARATUS TO VARY FUEL PRICES FOR
VEHICLES BASED ON ENVIRONMENTAL AND
CONSERVATION CONSIDERATIONS

Group Art Unit: 3629

Confirmation No.: 9365

Assistant Commissioner for Patents
Washington, DC 20231

APPEAL BRIEF IN SUPPORT OF APPEAL

FROM THE PRIMARY EXAMINER TO THE BOARD OF APPEALS

Sir:

Applicant herewith submits an appeal brief in support of the appeal to the Board of Appeals from the decision dated January 13, 2005, of the Primary Examiner finally rejecting claims 1-36. An appeal brief was previously filed 5/5/2005, but was rejected as noncompliant with 37 C.F.R. section 41. The present appeal brief is being filed within the 30 day time period allowed to file a compliant appeal brief. Applicant believes an appeal brief fee is not required, however if the referenced deposit account was not charged in the previous appeal brief the referenced deposit account should be charged at this time.

Docket No.: ROC920010100US1
Serial No.: 09/903,177

The appeal brief fee of \$340.00 is:

☐ Enclosed.

☒ Not required. (Fee paid in prior appeal.)

☐ Charged to Deposit Account No. 09-0465. A duplicate copy of this sheet is enclosed.

Docket No.: ROC920010100US1
Serial No.: 09/903,177

1. Real Party in Interest

The Real party in interest is International Business Machines, Inc., the assignee of the above-identified application.

2. Related Appeals and Interferences

There are no related appeals or interferences for the above-identified application.

3. Status of Claims

Claims 1-36 are pending. Claims 1-36 are rejected. Applicant appeals claims 1-36 from the final rejection of claims 1-36.

4. Status of Amendments

No amendments to the specification or claims have been submitted subsequent to final rejection.

5. Summary of Claimed Subject matter

Applicant is appealing from the Examiner's rejection of claims 1-36. Claim 1 is an independent claim. Claims 2-21 depend directly or indirectly from claim 1. Applicant will argue independent claim 1 and dependent claims 2-21 as a group, asserting that claim 1 is allowable, and therefore claims 2-21 are allowable. Claim 22 is an independent claim. Claims 23-36 depend directly or indirectly from claim 22. Applicant will argue independent claim 22 and dependent claims 23-36 as a group, asserting that independent claim 22 is allowable and therefore claims 23-36 are allowable.

In compliance with 37 C.F.R. §41.37 c(v) a concise explanation of the subject matter defined in independent claim 1, including references to the specification by page and line number, and to the drawings follow.

Docket No.: ROC920010100US1
Serial No.: 09/903,177

In brief, claim 1 claims a method for selling fuel to a vehicle, using vehicle specific data that is stored in the vehicle. The vehicle specific data identifies the vehicle as being of a particular category of vehicles. The vehicle specific data is transmitted to a fuel pump computer. The fuel pump computer uses the vehicle specific data as a determinant of the per unit price of the fuel. Claim 1 is copied below.

Independent claim 1 states:

A method for selling fuel to a vehicle, wherein the method comprises the steps of:

storing vehicle specific data in the vehicle;

transmitting said data from the vehicle to a fuel pump computer; and

determining, at least partially, by said fuel pump computer, a per unit price of the fuel sold to said vehicle, using said data.

Claim 1 claims a method for selling fuel to a vehicle. Page 6, lines 1-3 describes “a car 101 pulled up to a fuel pump 102”, and is shown in Fig. 1. A flowchart shown in Fig. 5 and described beginning on page 13, line 12 and continued on page 14 to line 24, shows an exemplary embodiment of a method in accordance with the invention for selling fuel to a vehicle.

Claim 1 includes the step of: “storing vehicle specific data in the vehicle”. “Vehicle specific data” being stored in the vehicle is taught in various places in the specification. For examples, see page 3, lines 5,6; page 3, lines 9-10; page 7, lines 4-8; page 15, line 23; page 15, line 28; Fig. 2, steps 203, 204; Fig. 6, block 608. Many examples of “vehicle specific data” are provided that make it unmistakably clear that the “vehicle specific data” is data stored in a vehicle that identifies a category of vehicle type that the instant vehicle falls into. This is completely consistent with dictionary definition of specific: “constituting or falling into a specifiable category”, “sharing or being those

properties of something that allow it to be referred to a particular category” (Webster’s Ninth New Collegiate Dictionary, copyright 1983, ISBN 0-87779-508-8). For examples of “vehicle specific information”, see page 2, lines 21-26; page 7, lines 5-8; page 16, lines 27,28. Claims 2-7 claim various “vehicle specific data” that clearly identify categories an instant vehicle may fall into.

Claim 1 includes the step of: “transmitting said data from the vehicle to a fuel pump computer”. Transmitting the data from the vehicle to the fuel pump computer is described, in various forms and embodiments in the specification. For examples: page 3, lines 10-13; page 7, line 4; page 10, line 18-page 13 line 25 describes a number of ways to transmit the data from the vehicle to the fuel pump computer. Fig. 1, element 103 shows “communication between the car 101 and the fuel pump 102”, as described on page 6, line 4. Fig. 2, step 202 establishes a secure connection with the pump. Fig. 2, in step 203, the pump reads vehicle data. These steps are described on page 7, lines 1-8. Figs. 3B, 3C, 3D show various means of coupling the vehicle specific data for communication. Figs. 3B, 4B and described on page 10, lines 24+) describes use of a magnetic transducer reading an encoded magnetic strip 403 (Fig. 4B), with the signal being transmitted on cable 302 of Fig. 3B. Figs. 3C, 4C, and description at page 12, lines 3+ describe use of a light receptor 304 and a light source 303 to read the vehicle specific data, which is then transmitted to the pump’s computer via cable 305. Printed, engraved or painted bar codes are read in embodiments described on page 12, lines 11-18. Fig. 3D and specification page 12, lines 19-28 and page 13, lines 1,2 teach transmitting using a cable and a jack/plug arrangement. Fig. 3E and specification, page 13, lines 3-11 teach reading of an infrared transmitter as part of the transmitting step.

Claim 1 further contains the step of: “determining, at least partially, by said fuel pump computer, a per unit price of the fuel sold to said vehicle, using said data”. The step of determining, at least partially, by said fuel pump computer, a per unit price of the

fuel sold to said vehicle, using said data, is described in many places in the specification. For example, at a high level, page 2, lines 13-26, continued on page 3, lines 1-13. Page 7, lines 9-15, refers to block 204 of Fig. 2, and describes using tabular information from "Table 1" found on page 7 to determine a price/gallon of fuel based on vehicle specific data that is (in the exemplary description) EPA Mileage that has been "read from the vehicle and the price per gallon is obtained from the table by the pump's computer". Another example of "determining, at least partially, by said fuel pump computer, a per unit price of the fuel sold to said vehicle, using said data" is found on page 8, lines 11-19, continuing on page 9, lines 1-20. "Determining, at least partially, by said fuel pump computer, a per unit price of the fuel sold to said vehicle, using said data" is also described on page 14, lines 6-9, with reference to block 504 of Fig. 5.

In compliance with 37 C.F.R. §41.37 c(v) a concise explanation of the subject matter defined in claim 22, including references to the specification by page and line number, and to the drawings follow.

In brief, independent claim 22 is an apparatus claim that mirrors the method claim of independent claim 1. Claim 22 claims an apparatus for selling fuel to a vehicle, including a storage device for storing vehicle specific data within the vehicle, a transmitter for transmitting the vehicle specific data to a fuel vendor, and a fuel pump computer which determines a per unit price for the fuel, using the vehicle specific data as a determinant of the per unit price. Independent claim 22 is copied below:

An apparatus for selling fuel to a vehicle, comprising:

- a storage device for storing vehicle specific data within said vehicle;**
- a transmitter for transmitting said data to a fuel vendor; and**
- a fuel pump computer, which determines a per unit price for the fuel, using,**
at least in part, said data.

Many examples of “vehicle specific data” in the specification were cited with reference to independent claim 1 *supra* and these citations apply also to claim 22. Applicant again submits that “vehicle specific data” is clearly described and compellingly supported with examples.

A storage device that is a semiconductor memory is described on page 12, lines 22, 23. A storage device that is made of magnetic material is described on page 11, lines 2-27, continuing on page 12, lines 1-2. A storage device such as printed, engraved, or painted patterns, optically readable is described on page 12, lines 3-18 and shown as reference 402 in Fig. 4C (a bar code example). In claim 23, the storage device is a semiconductor memory. In claim 22, the storage device is comprised of magnetic material. In claim 28 the storage device is an optically readable bar code. Applicant submits that a “storage device” is clearly described and compellingly supported with examples.

Several transmitters are described in the specification. Page 7, line 1-3, referring to block 202 of Fig. 2 describes “a secure connection is established between the vehicle and the fuel pump, creating an unambiguous relationship between the vehicle that will be fueled and the fuel pump.” On page 10, lines 25,26, “Cable 302 is used to transmit signals read by transducer 301 to the pump’s computer”. (Cable 302 is shown in Fig. 3B). On page 12, lines 4,5, “Signals from light receptor 304 are transmitted to the pump’s computer via cable 305.” (Cable 305 is shown in Fig. 3C). On page 12, lines 19-22, “FIG. 3D shows a direct electrical connection for transmission of vehicle data to the fuel pump’s computer. In this embodiment, a signaling cable 308 has a jack 307 which is pluggable into a plug 309 on the vehicle. Plug 309 is electrically coupled to a data source in the vehicle.” (It will be noted that “vehicle data” was used in this instance, but from the context of using the data as a determinant of per unit fuel price, it is clear that this is the “vehicle specific data”). On page 13, lines 3-7, “FIG. 3E shows yet another

embodiment of the enhanced nozzle. In this embodiment, infrared transmitter 313, coupled to the vehicle data storage, is placed on the vehicle near the vehicle's fuel filler pipe 314. An infrared receptor 311 is placed on the nozzle to receive data transmitted by the infrared transmitter 313. This data is then sent to the pump's computer via signaling cable 312." (It will be understood from the context that the "vehicle data storage" contains the "vehicle specific data"). In claim 33, the transmitter is wireless. In claim 35, the transmitter comprises an infrared transmitter. Applicant submits that a "transmitter" is clearly described and compellingly supported with examples.

Embodiments of "A fuel pump computer, which determines a per unit price for the fuel, using, at least in part, said data" is described in various places in the specification and drawings. For example, page 6, lines 5-17. Page 7, lines 9-15, referencing Table 1, continued on page 7, lines 1-10 shows an embodiment of the fuel pump computer determining a price per gallon of fuel. Another embodiment of the fuel pump computer determining a per unit price for fuel is found on page 8, lines 11-18, continued on page 9, lines 1-20. In claim 36, "...the fuel pump computer contains a program in a memory, said program, when executed by said fuel pump computer, being capable of determining a per unit price of fuel sold to the vehicle, using some or all of said vehicle specific data, and at least one rule authorized by a regulatory agency."

Applicant submits that a "fuel pump computer, which determines a per unit price for the fuel, using, at least in part, said data" is clearly described and compellingly supported with examples.

Applicant submits that, with the above concise explanation of the subject matter defined in each of the independent claims, which refer to the specification by page and line number, and to the drawings by reference number, has satisfied the requirements of 37 C.F.R. §41.37(c)(v).

6. Grounds of rejection to be reviewed on appeal

(A) In a final Office Action dated 1/13/2005, the Examiner rejects claims 1-21 under 35 U.S.C. 101 as being unconstitutional, asserting that a patent granted on these claims would prevent the Government from collecting taxes. This same rejection was made in a first Office Action dated 8/25/2004.

(B) In the final Office Action dated 1/13/2005, the Examiner rejects “claims 1, 22, 36 under 35 U.S.C. 102(b) as being anticipated by the article entitled ‘Minnesota Representative Proposes Mileage Tax to Replace Gas Tax’ (1/4/00)”. Note that claim 36 depends from independent claim 22. This same rejection was given in the first Office action dated 8/25/2004.

(C) In the final Office Action dated 1/13/2005, the Examiner states “claims 22, 28-33 rejected under 35 U.S.C. 102(b) as being anticipated by Walkey et al. (4469149). This same rejection was given in the first Office Action dated 8/25/2004. Note that claims 28-33 depend directly or indirectly from independent claim 22.

(D) In the final Office Action dated 1/13/2005, the Examiner states “Claims 22, 33-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Marion (2002/0046117).” This same rejection was given in the first Office Action dated 8/25/2004. Note that claims 33-35 depend directly or indirectly from independent claim 22.

Applicant believes the above to be “a concise statement of each ground of rejection presented for review” and therefore satisfies the requirements of 37 C.F.R. §41.37(c)(vi). The Examiner rejects a number of dependent claims under 35 U.S.C. 103, however, Applicant will argue that independent claims 1 and 22 are allowable, mooted the rejections under 35 U.S.C. 103.

7. Argument

(A) Rejection of claims 1-21 under 35 U.S.C. 101 as being unconstitutional because a patent granted on these claims would prevent the Government from collecting taxes.

Claim 1 and it's dependent claims 2-21 are being argued as a group. Claims 2-21 depend from claim 1, which Applicant submits is allowable, and therefore claims 2-22 are allowable.

In the Examiner's rejection of claims 1-21 under 35 U.S.C. 101 the Examiner argued, on page 2 of the final Office Action dated 1/13/2005, that *"Any patent issuing on claims 1-21 would have the effect of precluding the Congress from freely collecting taxes (i.e., the taxing of fuel purchases) pursuant to Article I, Section 8, Clause 1. If the Congress decided to tax fuel purchases and make the amount of the tax dependent on certain factors related to a person's vehicle, a patent granted on claims 1-21 could prevent Congress from collecting taxes used to provide for the general Welfare of the United States."*

The Examiner made the same rejection in a first Office Action dated 8/25/2004. Applicant responded on October 29, 2004 by (on page 9 of the Response) directing "the Examiner's attention to United States Patent and Trademark Office's 'General Information Concerning Patents'". Applicant provided a copy of that document along with his Response. A copy of the USPTO's "General Information Concerning Patents" will be found in the "Evidence Appendix" of this Appeal Brief. The USPTO document states on page 26 that "The government may use any patented invention without permission of the patentee, but the patentee is entitled to obtain compensation for use by or for the government."

Surprisingly, in his Office Action dated 1/13/2005, the Examiner maintained his rejection, choosing to disparage the USPTO document (page 13 of the Office Action dated 1/13/2005), and continued, *“The cited portion of the PTO handout even discloses that Congress is responsible for compensation to the patentee because the patentee can sue the government in Federal Court, which seems to contradict the concept of ‘freely collecting taxes.’ Even considering the text of the PTO handout, the rejection will not be removed and the argument is considered non-persuasive.”*

The government’s ability to use any patented invention is notoriously well known, and Applicant is surprised at both the Examiner’s original rejection and the Examiner’s maintenance of the rejection after being informed of the patentee’s inability to exclude the government from practicing the teachings of the patent. The USPTO’s “General Information Concerning Patents” citation is simply the essence of **28 U.S.C. 1498** copied into a USPTO publication. The text of **28 U.S.C. 1498(a)** is given below:

“Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner’s remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture. Reasonable and entire compensation shall include the owner’s reasonable costs, including reasonable fees for expert witnesses and attorneys, in pursuing the action if the owner is an independent inventor, a nonprofit organization, or an entity that had no more than 500 employees at any time during the 5-year period preceding the use or manufacture of the patented invention by or for the United States. Notwithstanding [¶] the preceding sentences, unless the action has been pending for more than 10 years from the time of filing to the time that the owner applies for such costs and fees, reasonable and entire compensation shall not include such costs and fees if the court finds that the position of

the United States was substantially justified or that special circumstances make an award unjust.

For the purposes of this section, the use or manufacture of an invention described in and covered by a patent of the United States by a contractor, a subcontractor, or any person, firm, or corporation for the Government and with the authorization or consent of the Government, shall be construed as use or manufacture for the United States.

The court shall not award compensation under this section if the claim is based on the use or manufacture by or for the United States of any article owned, leased, used by, or in the possession of the United States prior to July 1, 1918.

A Government employee shall have the right to bring suit against the Government under this section except where he was in a position to order, influence, or induce use of the invention by the Government. This section shall not confer a right of action on any patentee or any assignee of such patentee with respect to any invention discovered or invented by a person while in the employment or service of the United States, where the invention was related to the official functions of the employee, in cases in which such functions included research and development, or in the making of which Government time, materials or facilities were used.”

The Examiner’s rejection regarding the government “freely collecting taxes” is also curious and in error. It is firmly and indisputably established above that the government **can** legally practice the teachings of any patent, so the Examiner is in error if he asserts that “freely” pertains to a patentee’s alleged ability to exclude the government from practicing the teachings of their patent. If, on the other hand, the Examiner’s intent was “freely” meaning “without cost”, the rejection is equally in error. The cost of collecting taxes is high, not “free”, with the Internal Revenue Service budgets running

approximately \$10 billion per year. The IRS must employ people, purchase data processing equipment, mail forms, and so on, paying the real costs of collecting taxes. Applicant fully intends to collect payments from the government when this application issues and upon such time as the government mandates its use... that is in accordance with the Applicant's rights prescribed in the law. The government indisputably would remain "free" to use the invention claimed in the sense that the patentee could not exclude the government from using the invention. The government has never been able to collect taxes "freely" in the sense of having no costs associated with the collection.

For the above reasons, Applicant submits that the Examiner's rejection of claims 1-21 under 35 U.S.C. 101 is in error and asks that the Board overturn the rejection of claim 1 and its dependent claims 2-21 under this ground of rejection.

(B) Rejection of claims 1, 22, 36 under 35 U.S.C. 102(b) as being anticipated by the article entitled 'Minnesota Representative Proposes Mileage Tax to Replace Gas Tax' (1/4/00)

Independent claims 1 and 22 and claim 36 which depends from claim 22 are being argued as a group. Claim 36 depends from independent claim 22, which Applicant submits is allowable; therefore claim 36 is also allowable.

The Examiner argues in the Final Office Action dated 1/13/2005 that "The article discloses the step of selling fuel, where the tax the government will charge for the fuel purchase depends on the mileage one drives. A chip (storage device) in the fuel tank stores vehicle data, and a chip in the fuel pump calculates the amount of the tax, which results in an end price for the fuel purchase."

The Examiner cited the same article in his rejections in the Office Action dated 8/25/2004. In response, Applicant responded in his Response of October 29, 2004: *Applicant first notes that a careful reading of the article shows that the proposed scheme*

*is diametrically opposite of the present invention. That is, 'mileage' in the article refers to how many miles have been driven, and will tax on miles driven, not fuel efficiency, weight, etc. The problem the article is attempting to solve is to collect more taxes from efficient vehicles, which travel further on a gallon of gas, as opposed to the intent of the present invention, which is to encourage purchase of efficient vehicles by charging less per gallon. **To the point of defeating the rejection under 35 U.S.C. 102(b)**, Applicant submits that Applicant's claim element, 'storing vehicle specific data in the vehicle' suffices. The article cited simply suggests 'that computer chips in the gas tank and in the fuel pump could calculate how many miles a vehicle has been driven'. To compute this, only a vehicle's odometer change since last purchase. Odometer readings are not vehicle specific data. For example, an SUV and an efficient hybrid would both report the same number of miles going between point A and point B."*

In the Office Action dated 1/13/2005, page 14 the Examiner states:
*Applicant has argued that the limitation of 'storing vehicle specific data in the vehicle' is not found in the prior art because the prior art only stores miles driven by a vehicle and this cannot be called vehicle specific data. **The entire argument comes down to whether or not it is reasonable to consider the miles a specific vehicle has driven as vehicle specific data.** Odometer readings for vehicles are vehicle specific data as they represent the miles the vehicle has been driven. The examiner respectfully disagrees with applicant's interpretation of the term 'vehicle specific data', which is a broad term and can mean almost anything. Concerning the argument about two vehicles going from A to B, just because another vehicle will have a similar or same mileage does not mean that the mileage is not vehicle specific data."*

Applicant strongly disagrees with the examiner's assertion that vehicle specific data can mean almost anything. Webster's Ninth New Collegiate Dictionary, © 1983,

ISBN 0-87779-508-7 defines “specific” as meaning (1)(a) constituting or falling into a specifiable category, (1)(b) sharing or being those properties of something that allow it to be referred to a particular category. As used in the application, “Vehicle specific data” clearly means data that identifies what particular category the particular vehicle is in. Applicant provided many examples (see citations with page and line numbers as given in “summary of claimed subject matter” *supra*) of particular categories in the specification of what is meant by vehicle specific data, e.g., EPA gas mileage; weight of the vehicle; quantities of undesirable emissions of the vehicle as determined by an authorized agency; hybrid gas/electric or gas/fuel cell; and capability of using fuels a portion of which are renewable are named examples of vehicle specific data. **In all** of these examples, vehicle specific data identifies a characteristic category of the particular vehicle defined with the vehicle specific data that is in the particular vehicle. The fact that a 12 miles per gallon SUV’s odometer registers 200 miles between point A and point B does **not** make “200 miles” a “vehicle specific data” as the Examiner alleges, because odometers in **ALL** vehicles, from the most profligate SUV to the most economical 50 miles per gallon hybrid, traveling between point A and point B, will register 200 miles on that route. “12 miles per gallon”, and “50 miles per gallon **ARE** examples of “vehicle specific data”. Miles per gallon was described as one example of vehicle specific data on page 7, lines 9-15 and Table 1. “200 miles” is **NOT** “vehicle specific data” as it does not identify a category in which a vehicle falls. Even a pedestrian’s pedometer would register 200 miles after a long walk from point A to point B. In other words, a reasonable person would not conclude that map distance is “vehicle specific data”.

Applicant submits that the Examiner’s sentence highlighted in bold in the above citation of the Examiner’s rejection exposes the Examiner’s error in correctly interpreting the term “vehicle specific data” as clearly taught in the specification. The Examiner’s “miles a specific vehicle has driven...” really means “miles a particular vehicle has

driven”. The Examiner has curiously chosen a use of “specific” that is repugnant to Applicant’s description and usage in “vehicle specific data”. That is, the Examiner’s “*specific*” meaning “*particular*”. It is abundantly and unmistakeably clear that, in Applicant’s specification, “vehicle specific data” is data contained in a vehicle that identifies a category of vehicles that the vehicle falls into. Many references to examples of how “vehicle specific data” relate a particular vehicle to a category were given earlier. Applicant submits that the Examiner is incorrectly interpreting Applicant’s term, “vehicle specific data”. **The Examiner’s assertion that distance between two map coordinates as reported on odometer reading is “vehicle specific data” as taught in the specification is clearly incorrect.**

For the above reasons, Applicant submits that the Examiner’s rejection of independent claims 1,22, and dependent claim 36 under 35 U.S.C. 102(b) is in error and asks that the Board overturn the rejection.

(C) Rejection of claims 22, 28-33 rejected under 35 U.S.C. 102(b) as being anticipated by Walkey et al. (4469149).

Independent claim 22 and dependent claims 28-33 are being argued as a group. Claims 28-33 depend from independent claim 22, which Applicant submits is allowable; therefore claims 28-33 are also allowable.

In the final Office Action dated 1/13/2005, the Examiner states:

Claims 22, 28-33 rejected under 35 U.S.C. 102(b) as being anticipated by Walkey et al. (4469149).

For claim 22,28,29,30,33, Walkey discloses a system for determining the price of fuel based on data transmitted from the vehicle to the pump. Walkey discloses a storage

device 10, a transmitter 20. The pump determines the price of fuel based on the data transmitted to the pump. See column 5, lines 3-6. The price for fuel will be determined by the grade of fuel one desires.”

In his response to the Office Action on October 29, 2004, on this same allegation in the first Office Action dated August, Applicant stated:

The actual wording of column 5, lines 3-6 states: ‘The fuel grade requirement of the vehicle can if desired be included in the vehicle identification code to prevent refueling with incorrect fuel.’ In fact, Walkey simply ensures that an incorrect fuel is not used. No mention is made in Walkey as to teaching determining a per unit price for fuel, since Walkey could not pump an incorrect fuel; the only fuel pumpable remains at a fixed price per unit and is not determined by the vehicle specific information. The Applicant respectfully submits that the Examiner’s allegation that Walkey’s invention determines the per unit price of fuel is as inapplicable to the Applicant’s’s claim as if it were alleged that a leaded pump nozzle determines the per unit price of fuel because the leaded pump nozzle is large and will not fit into the filler tube of vehicles that require leaded fuel.”

In the Office Action dated 1/13/2005, the Examiner counter argues “For claims 22,28-33 (Walkey et al.) And claims 22, 33-35, (Marion) applicant has argued that there is no teaching of determining the per unit price of fuel. When one stipulates that only super unleaded fuel is to be put into the vehicle, this will result in the price per unit of fuel being determined because you are paying the price for super unleaded, which is a higher per unit price than regular unleaded is. The choice of fuel grade determines the price per unit of fuel you will have to pay. Additionally, with respect to Marion, the amount of gas that a given vehicle will accept before having a full tank is vehicle specific data, contrary to what has been argued.”

In Examiner's counter argument in the Office Action of 1/13/2005, the Examiner argues on page 14, using Walkey to reject independent claim 22 and dependent claims 28-33:

"When one stipulates that only super unleaded fuel is to be put into the vehicle, this will result in the price per unit of fuel being determined because you are paying the price for super unleaded, which is a higher price per unit of fuel you will have to pay."

Applicant submits his argument relative to Walkey (above) has not been rebutted by the Examiner. Applicant submits that a reasonable person would not conclude that the claim element in independent claim 22 "a fuel pump computer, which determines a per unit price for the fuel, using, at least in part, said data." is taught by Walkey.

In stark contrast, in Walkey, the customer selects a particular fuel having a fixed price per gallon from a variety of different fuels and is simply stopped from purchasing the wrong fuel, just as a larger/smaller nozzle size determines ability to use leaded/unleaded gasoline, and it is unreasonable to contend that nozzle size determines how a fuel pump computer determines per unit fuel price. Likewise, the fuel pump in Walkey does **not** determine a per unit price for the fuel pumped. Bottom line, in Walkey, it is the customer, making allowable fuel grade selections, not the fuel pump computer, that determines a per unit price for the fuel, using, at least in part, said data.

For the above reasons, Applicant submits that the Examiner's rejection of independent claim 22, and dependent claims 28-33 over Walkey is in error, and asks the Board to overturn the rejection of independent claim 22 and dependent claims 28-33.

(D) Rejection of Claims 22, 33-35 under 35 U.S.C. 102(e) as being anticipated by Marion (2002/0046117)."

Rejection of claims 22, 33-35 under 35 U.S.C. 102(e) are being argued as a group. Claims 33-35 depend from claim 22 which Applicant submits is allowable, making claims 33-35 allowable.

In the Final Office Action dated 1/13/2005, the Examiner states *“For claims 22,28-33 (Walkey et al.) And claims 22, 33-35, (Marion) applicant has argued that there is no teaching of determining the per unit price of fuel. When one stipulates that only super unleaded fuel is to be put into the vehicle, this will result in the price per unit of fuel being determined because you are paying the price for super unleaded, which is a higher per unit price than regular unleaded is. The choice of fuel grade determines the price per unit of fuel you will have to pay. Additionally, with respect to Marion, the amount of gas that a given vehicle will accept before having a full tank is vehicle specific data, contrary to what has been argued.”*

Applicant has addressed the rejections over Walkey reference *supra*.

Addressing the Examiner’s counter argument with respect to Marion, Applicant had responded to the Examiner’s first rejection of claims 22, 33-35 under 35 U.S.C. 102(e) as being anticipated by Marion (2002/0046117) in his October 29, 2004 response: *“A careful reading of paragraphs 230-243 cited by the Examiner shows no teaching of Applicant’s claim element ‘a fuel pump computer, which determines a per unit price for the fuel, using, at least in part, said data’. In contrast, Marion’s invention (see paragraph 238) simply teaches ‘Once ullage is determined the control system preferably determines or calculates an estimated cost of fueling the vehicle based on the ullage information. In order to do so, the type of fuel and fuel grade must be determined (block 1750). The dispenser controller may provide a prompt at the display 100 for the customer to select the type of fuel and grade desired for fueling (block 1755).’ Applicant further respectfully submits that Marion’s ‘ullage information is any type of information*

which relates to tank ullage or from which ullage can be derived' (so the pump can figure out how much gas it would take to fill the tank) is not 'vehicle specific data'." In fact, all Marion is doing is computing an estimated cost of filling the fuel tank based upon how much fuel is required to fill the tank and the **fixed** per unit price for the selected fuel. In particular, a volume of fuel needed to fill a tank would apply to vehicles of **ANY** category and Applicant submits that it is not reasonable to read Marion's "ullage" as vehicle specific data. Marion does not teach anything about the fuel pump computer determining a per unit price of fuel. The Examiner did not add any new arguments with respect to Marion in his 1/13/2005 Office Action - see page 15, first paragraph in that Office Action.

Applicant therefore submits that the Examiner is in error in his rejection of independent claim 22 and dependent claims 33-35 over Marion, and asks the Board to overturn the rejection of independent claim 22 and dependent claims 33-35 over Marion.

Applicant believes that the arguments, headings, and subheadings (identifying claims argued as a group and identifying the claims by number) satisfy the requirements of 37 C.F.R. § 41.37(vii).

8. Claims Appendix

1. (Original) A method for selling fuel to a vehicle, wherein the method comprises the steps of:

storing vehicle specific data in the vehicle;
transmitting said data from the vehicle to a fuel pump computer; and
determining, at least partially, by said fuel pump computer, a per unit price of the fuel sold to said vehicle, using said data.

2. (Original) The method of claim 1, wherein the data comprises a value indicative of how far the vehicle is capable of going on a unit of fuel.

3. (Original) The method of claim 1, wherein the data comprises a value indicative of the weight of the vehicle.

4. (Original) The method of claim 1, wherein the data comprises a value indicative of the amount of at least one chemical composition emitted by the vehicle.

5. (Original) The method of claim 1, wherein the data comprises a vehicle identification number.

6. (Original) The method of claim 1, wherein the data comprises an indicator that the vehicle is capable of using fuel which is at least partially comprised of a renewable resource.

7. (Original) The method of claim 1, wherein the data comprises an indicator that the vehicle is a hybrid gasoline/electric vehicle.

8. (Original) The method of claim 1, wherein the step of determining a per unit price of fuel sold to said vehicle further comprises searching a lookup table for vehicle specific data in order to determine a per unit price for fuel for the vehicle.

9. (Original) The method of claim 1, wherein the step of determining a per unit price of fuel sold to said vehicle further comprises use of an equation which utilizes said vehicle specific data to at least partially determine the per unit price for the fuel sold to the vehicle.

10. (Original) The method of claim 1, wherein the step of determining a per unit price of fuel sold to said vehicle further comprises the use of a database query which utilizes said vehicle specific data to at least partially determine the per unit price for the fuel sold to the vehicle.

11. (Original) The method of claim 1, wherein the step of transmitting said data uses wireless means.

12. (Original) The method of claim 11, further comprising a step of periodically verifying that the fuel being delivered is being pumped into the vehicle from which the vehicle specific data was used to determine the per unit price.

13. (Original) The method of claim 12, further comprising a step wherein a computer in the vehicle receives information on fuel level in a fuel tank in the vehicle and periodically transmits said fuel level or a rate of change of said fuel level to the fuel pump computer; said fuel pump computer using said transmitted fuel level or said rate of change of fuel level to verify that the per unit price is correct for the vehicle being fueled.

14. (Original) The method of claim 1, wherein the step of transmitting said data from the vehicle is by means of an electrical coupling comprising a signaling cable, a plug at an end of the signaling cable, and a jack on the vehicle to be fueled; said jack being electrically coupled to a device containing said data in the vehicle.

15. (Original) The method of claim 1, wherein the step of transmitting said data from the vehicle is by means of a magnetic transducer placed on a portion of a nozzle which is inserted into a fuel filler pipe on the vehicle; said magnetic transducer reading the vehicle data from one or more encoded magnetic strips situated in a portion of the fuel filler pipe through which the magnetic transducer passes; and wherein said data received by the fuel pump computer travels over a signaling cable between said magnetic transducer and said fuel pump computer.

16. (Original) The method of claim 15, further comprising a step wherein if fueling is suspended for a predetermined time, said nozzle must be reinserted past said encoded magnetic strips in order to resume receiving fuel at the determined per unit price.

17. (Original) The method of claim 1, wherein the step of transmitting said data from the vehicle is done by optically reading a bar code; said bar code being physically located inside the fuel filler pipe and read by a light source and a light receptor on the fuel nozzle; and wherein said data travels via a signaling cable between said light receptor and said fuel pump computer.

18. (Original) The method of claim 1, wherein the step of transmitting said data from said vehicle is by means of infrared data transmission sent from a sending unit on the vehicle to a receiving unit on the fuel nozzle.

19. (Original) The method of claim 1, further comprising the step of displaying to the customer the per unit fuel price.

20. (Original) The method of claim 19, further comprising the step of displaying an explanation of how the per unit fuel price was determined.

21. (Original) The method of claim 1, wherein the step of storing said vehicle specific data is performed under the direction of a regulatory agency after the vehicle has been purchased by the customer.

22. (Original) An apparatus for selling fuel to a vehicle, comprising:

- a storage device for storing vehicle specific data within said vehicle;
- a transmitter for transmitting said data to a fuel vendor; and
- a fuel pump computer, which determines a per unit price for the fuel, using, at least in part, said data.

23. (Original) The apparatus of claim 22, wherein the storage device is a semiconductor memory.

24. (Original) The apparatus of claim 22, wherein the storage device is comprised of magnetic material.

25. (Original) The apparatus of claim 24, wherein the magnetic material is positioned inside a fuel filler pipe on said vehicle, and is of a substantially cylindrical or partially cylindrical shape.

26. (Original) The apparatus of claim 25, further comprising a substantially cylindrical or partially cylindrical collar positioned and affixed between said magnetic material and the inside wall of said fuel filler pipe; said collar being made of a nonferrous material and of suitable thickness to prevent shunting of magnetic fields of said magnetic material by said fuel filler pipe.

27. (Original) The apparatus of claim 26, further comprising a magnetic transducer affixed to a fuel nozzle; said transducer capable of reading information encoded upon said magnetic material as said nozzle is inserted into said fuel filler pipe and past the magnetic material.

28. (Original) The apparatus of claim 22, wherein the storage device is an optically readable bar code.

29. (Original) The apparatus of claim 28, wherein the bar code is printed, engraved, or painted on the inside wall of a fuel filler pipe on said vehicle.

30. (Original) The apparatus of claim 29, further comprising a light source and a light receptor on a fuel nozzle; said light source capable of illuminating said bar code, and said receptor capable of detecting and reading said bar code as said nozzle passes the bar code as said nozzle is inserted into said fuel filler pipe.

31. (Original) The apparatus of claim 28, wherein the bar code is printed, engraved, or painted on a substantially cylindrical or partially cylindrical collar which is positioned and affixed inside a fuel filler pipe on said vehicle.

32. (Original) The apparatus of claim 31, further comprising a light source and a light receptor on a fuel nozzle; said light source capable of illuminating said bar code, and said receptor capable of detecting and reading said bar code as said nozzle passes the bar code as said nozzle is inserted into said fuel filler pipe.

33. (Original) The apparatus of claim 22, wherein said transmitter is wireless.

34. (Original) The apparatus of claim 33, further comprising a fuel sensor in the vehicle; a computer in the vehicle which is electrically coupled to and which periodically reads fuel quantity information from said fuel sensor; said computer in the vehicle further being coupled to a wireless interface unit which controls a first wireless unit in said vehicle; said first wireless unit being in communication with a second wireless unit on a fuel pump; said second wireless unit being electrically coupled to said fuel pump computer; said fuel quantity information transmitted from said computer in the vehicle through said wireless interface unit to said first wireless unit, and from said first wireless unit to said second wireless unit, and from said second wireless unit to said fuel pump computer.

35. (Original) The apparatus of claim 22, wherein the transmitter comprises an infrared transmitter on said vehicle and an infrared receptor attached to a fuel pump nozzle.

36. (Original) The apparatus of claim 22, wherein said fuel pump computer contains a program in a memory; said program, when executed by said fuel pump computer, being capable of determining a per unit price of fuel sold to the vehicle, using some or all of said vehicle specific data, and at least one rule authorized by a regulatory agency.

9. Evidence appendix

Attached is a copy of “United States Patent and Trademark Office General Information Concerning Patents”.

This document is referred to in the “Arguments” section of this Appeal Brief, in the section, (A) Rejection of claims 1-21 under 35 U.S.C. 101 as being unconstitutional because a patent granted on these claims would prevent the Government from collecting taxes.

This document was filed with a response dated October 29, 2004, responsive to the First Office Action dated 8/25/2004.

Applicant believes this Evidence appendix satisfies the requirements of 37 C.F.R. § 41.37(c)(ix).

10. Related proceedings appendix

There are no related proceedings. Therefore there are no copies of decisions rendered by a court of the Board attached here.

Applicant believes this appendix satisfies the requirements of 37 C.F.R. § 41.37(c)(x).

Date: July 19, 2005

Respectfully submitted,

STEVEN P. JONES

By Robert R. Williams
Robert R. Williams, Patent Agent
Registration No.: 48,395

From:
IBM Corporation
Intellectual Property Law
Dept. 917, Bldg. 006-1
3605 Highway 52 North
Rochester, MN 55901

Telephone: (507)253-2761
Fax: (507)253-2382

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UNDER 37 CFR 1.8(a)

I hereby certify that the enclosed or attached correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on July 19, 2005.

Susan K. Berge
Susan K. Berge

Docket No.: ROC920010100US1
Serial No.: 09/903,177